

ADDENDUM 1

TIP Number: C-4918A County: Cabarrus Poplar Tent (SR1394) and US 29 Intersection Improvements

April 13, 2017

- 1. Mandatory Pre-bid Meeting Attendance Sheet attached.
- 2. Special Provision added for Emergency Vehicle Preemption. Attached.
- 3. Revised Unit Price Schedule adding a pay item for Emergency vehicle preemption device. Attached.
- 4. Clarification on metal poles and mast arms. Metal poles and mast arms will not have a supplemental durable color coating.
- 5. Pre-Bid meeting minutes are attached.
- 6. This addendum shall become a part of the drawings and specifications for the above project.

End of Addendum 1



Poplar Tent (SR 1394) and US 29 Intersection Improvements

TIP Number: C-4918A

Prebid Attendance Sheet

March 30, 2017, 2:00 pm Brown Operations Center

Name	Representing	Phone #	
Curtis BARbee	RK&K-NCDOT	980-581-1416]
Angela West	PMC, Inc.	701 181 1010 PE	formance me
Derrick Martin	Traffic Control Devices	704-680-9180	d.martine medit
TED HARMON	20/ade Construction	701363-4854	IEDHe zoladza
JACK Gowld	UNited OF CAROLINA	5 704,999 4869	head
JASON BREE	SEALAND CONTRACTORS GN.	704 522 1102 Se	on. breed aland contractor
Eve Hibbler	Blythe Development	704-588 0023 chibbi	er oblythe lopment e
She Hyde	City of Concord	704.920.5401 hyd	
Joe Wilson	City of Concord		
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CITY OF CONCORD SPECIAL PROVISION FOR EMERGENCY VEHICLE PREEMPTION

EMERGENCY VEHICLE PREEMPTION

1. DESCRIPTION

This work shall consist of furnishing and installing emergency preemption equipment in accordance with these specifications and as shown on the plans or as directed by the Engineer.

2. EQUIPMENT

Emergency preemption equipment shall be optically activated providing all features and functions as the existing equipment with the City's emergency preemption system and shall fully interface with that existing equipment. Existing equipment consists of GTT Model 762 Phase Selectors and Model 711 Optical Detectors.

The preemption conductor cable shall be designed and manufactured explicitly for the use with Infrared preemption detection systems. This cable shall meet the following requirements:

- 600 volt rating
- Three Conductor AWG #20 (7x28) stranded, individually tinned copper: Yellow, Blue, and orange.
- Drain Conductor AWG #20 (7x28) stranded, individually tinned copper
- Aluminized polyester shield with 20% overlap.

Mounting assemblies for the detectors shall be fabricated from corrosion resistant materials or shall be galvanized.

3. PROCEDURES

Locations of optical detectors shown on plans are approximate; exact locations shall be as required for proper alignment. Installation of all emergency preemption equipment shall be in accordance with the manufacturer's recommendations. The Contractor shall provide all equipment necessary to completely install this equipment including programming the phase selectors. Software required for programming the phase selectors shall remain the property of the City. Emergency preemption conductor cables shall be permanently identified and tags shall indicate preempt detector (preempt confirmation for the preemption cable) and the direction of approach. The Contractor shall provide the manufacturer's installation, operational and maintenance manuals for each piece of equipment to the Engineer.

4. TESTING

Testing of the emergency preemption system shall be accomplished in the presence of the City. The Contractor shall contact the City 48 hours in advance to arrange system testing. The City will provide an operator and vehicle equipped with an emitter for the test to determine if equipment is operating and logging properly. Deficiencies shall be corrected and faulty equipment replaced by the Contractor at no expense to the City.

5. MEASUREMENT AND PAYMENT

Emergency vehicle preemption device (1 way) will be measured in units of each and will be paid for at the contract unit price per each. This price shall include the mounting bracket necessary to install the detector on a mast arm or span wire as shown on the plan, mounting and wiring the detector, cabling to connect the optical detectors to the cabinet equipment, installation of the encoded detector card(s), software, installing and wiring all items into the controller cabinet to ensure proper operations of emergency vehicle preemption on approach locations as shown on the plans. No separate measurement or payment will be made for testing, adjustments for proper system operation, or system documentation.

Payment will be made under:	
Pay Item	Pay Unit
Emergency vehicle preemption device (1 way)	Each

UNIT PRICE SCHEDULE

City Project # 2008-012 TIP #: C-4918A

	1	T	11P #: C-49	10/1		
	Sect.		Quantity	Unit	Unit Price	Total Amount
No.	No.	Item Description				
		ROADWAY ITEMS				
1	800	Mobilization	1	LS		
2	801	Construction Surveying	1	LS		
3	226	Supplemental Clearing and Grubbing	1	Acre		
4	226	Grading	1	LS		
5	226	Undercut Excavation	250	CY		
6	SP	Borrow Excavation (Pipe Installation)	100	CY		
7	300	Foundation Cond.Mat, Minor Strs	280	Tons		
8	300	Foundation Conditioning Geotextile	870	SY		
9	310	15" RC Pipe Culv, Class III	6	LF		
10	310	15" RC Pipe Culv, Class IV	2,219	LF		
11	310	18" RC Pipe Culv, Class IV	87	LF		
12	310	30" RC Pipe Culv, Class IV	244	LF		
13	310	18" CS Pipe Culv., 0.064" Thick	39	LF		
14	340	Pipe Removal	23	LF		
15	545	Incidental Stone Base	128	Tons		
16	610	Base Course, Type B 25.0 B	1,800	Tons		
17	610	Binder Course, Type I 19.0 B	1,340	Tons		
18	610	Surface Course, Type S 9.5 B	690	Tons		
19	610	Surface Course, Type SF 9.5 A	42	Tons		
20	620	AsphBinder for Plant Mix	185	Tons		
21	SP	Asphalt Based Pavement Sealer	6,458	SY		
22	806	Right of Way Markers	19	Each		
23	840	Pipe Collars	0.6	CY		
24	840	Masonry Drainage Structures	30	Each		
25	840	Masonry Drainage Structures	6.8	LF		
26	840	Frame and Grate, 840.14	7	Each		
27	840	Frame w / Two Grates, 840.17	1	Each		
28		Frame w / Two Grates, 840.18		Each		
29	840	Frame w / Two Grates, 840.16	7	Each		

30	840	Frame w / Two Grates, 840.24	2	Each	
31		Frame w/Grate and Hood 840.03 Type E		Each	
32		Frame w/Grate and Hood 840.03 Type F		Each	
33		Frame w/Grate and Hood 840.03 Type G		Each	
34		MH Frame and Cover, 840.54		Each	
35		Junction Box 840.31		Each	
36		T.B.J.B , 840.34		Each	
37		1'-6" Concrete Curb and Gutter		LF	
38		2'-0" Concrete Curb and Gutter		LF	
39		2'-6" Concrete Curb and Gutter	2,720		
40		4" Concrete Sidewalk		SY	
41		Concrete Curb Ramps	14		
42		5" Mono. Islands (Surface mounted)	720		
43		5" Mono. Islands (Keyed In)	440		
44		Adjustment of Catch Basins	1	EA	
45		Convert DI to JB	3		
46		Convert DI to JB w/ MH	1	EA	
47		Impact Attenuator Unit, Type 350	1	Each	
48		Steel Beam Guardrail	525.0	LF	
49	862	Steel Beam Guardrail (Shop Curved)	87.5	LF	
50	862	Additional Guardrail Posts	5	Each	
51	862	Guardrail Anchor, Type AT-1	1	Each	
52	862	Guardrail Anchor, Type CAT-1	2	Each	
53	SP	GRAU, Type 350	1	Each	
54	866	Chain Link Fence, 72" Fabric	358	LF	
55	866	Metal Line Posts for 72" Chain Link Fence	31	Each	
56	866	Metal Term. Posts for 72" Chain Link Fence	10	Each	
57	866	Metal Gate Posts for 72" Chain Link Fence	6	Each	
58	866	Single Gates 72" High, 20' Wide	1	Each	
59		Single Gates 72" High, 25' Wide		Each	
60		Double Gates 72" High, 70' Wide		Each	
61		Plain Rip Rap, Class I	20	Ton	
62	876	Plain Rip Rap, Class B	2	Ton	
63	876	Geotextile for Drainage	225	SY	

64	901	Contractor Furnished, Type D Sign	30.10	SF		
65		Contractor Furnished, Type E Sign	178.25			
66		Contractor Furnished, Type F Sign	173.31			
67		Supports, 3 LB Steel U-Channel	705.00			
68		Sign Erection, Type D		Each		
69		Sign Erection, Type E		Each		
70		Sign Erection, Type F		Each		
71		Disposal of Sign System, U-Channel		Each		
72		Disposal of Support, U-Channel		Each		
73	907	Disposal of Sign, D, E, or F	2.00	Each		
74	1110	Stationary Work Zone Signs	312	SF		
75	1110	Portable Work Zone Signs	672	SF		
76	1115	Flashing Arrow Board	4	EA		
77	1120	Portable Changeable Message Sign	4	Each		
78	1130	Drums	400	Each		
79	1135	Cones	50	Each		
			00	IE		
80	1145	Barricades (Type III)	88	LF		
80 81		Barricades (Type III) TMA		Each		
	1165		4			
81	1165 SP	ТМА	20	Each		
81 82	1165 SP 1251	TMA Law Enforcement	20	Each Hr Each		
81 82 83	1165 SP 1251 1205	TMA Law Enforcement Temporary Raised Pavement Markers	4 20 175	Each Hr Each LF		
81 82 83 84 85	1165 SP 1251 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4")	4 20 175 30,208	Each Hr Each LF		
81 82 83 84 85 86	1165 SP 1251 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8")	4 20 175 30,208 2,436 776	Each Hr Each LF		
81 82 83 84	1165 SP 1251 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12")	4 20 175 30,208 2,436 776 474	Each Hr Each LF LF LF		
81 82 83 84 85 86 87	1165 SP 1251 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24")	4 20 175 30,208 2,436 776 474	Each Hr Each LF LF LF		
81 82 83 84 85 86 87 88	1165 SP 1251 1205 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24") Paint Marking Characters	4 20 175 30,208 2,436 776 474 16	Each Hr Each LF LF LF LF LF Each		
81 82 83 84 85 86 87 88	1165 SP 1251 1205 1205 1205 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24") Paint Marking Characters Paint Marking Symbols Removal of Pavement Marking (4") Removal of Pavement Marking (24")	4 20 175 30,208 2,436 776 474 16 76 400	Each Hr Each LF LF LF LF Each Each		
81 82 83 84 85 86 87 88 89 90	1165 SP 1251 1205 1205 1205 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24") Paint Marking Characters Paint Marking Symbols Removal of Pavement Marking (4")	4 20 175 30,208 2,436 776 474 16 400 150	Each Hr Each LF LF LF LF Each Each Each		
81 82 83 84 85 86 87 88 89	1165 SP 1251 1205 1205 1205 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24") Paint Marking Characters Paint Marking Symbols Removal of Pavement Marking (4") Removal of Pavement Marking Symbols &	4 20 175 30,208 2,436 776 474 16 400 150	Each Hr Each LF LF LF Each Each LF Each		
81 82 83 84 85 86 87 88 89 90 91 92 93	1165 SP 1251 1205 1205 1205 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24") Paint Marking Characters Paint Marking Symbols Removal of Pavement Marking (4") Removal of Pavement Marking (24") Removal of Pavement Marking Symbols & Characters	4 20 175 30,208 2,436 776 474 16 400 150	Each Hr Each LF LF Each Each LF LF LF LF LF LF LF LF		
81 82 83 84 85 86 87 88 89 90 91	1165 SP 1251 1205 1205 1205 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24") Paint Marking Characters Paint Marking Symbols Removal of Pavement Marking (4") Removal of Pavement Marking (24") Removal of Pavement Marking Symbols & Characters Thermoplastic (4", 90 MILS)	4 20 175 30,208 2,436 776 474 16 400 150 20 12,425	Each Hr Each LF LF Each Each LF LF LF LF LF LF		
81 82 83 84 85 86 87 88 89 90 91 92 93 94	1165 SP 1251 1205 1205 1205 1205 1205 1205 1205	TMA Law Enforcement Temporary Raised Pavement Markers Paint (4") Paint (8") Paint (12") Paint (24") Paint Marking Characters Paint Marking Symbols Removal of Pavement Marking (4") Removal of Pavement Marking Symbols & Characters Thermoplastic (4", 90 MILS) Thermoplastic (4", 120 MILS)	4 20 175 30,208 2,436 776 474 16 400 150 20 12,425 2,679	Each Hr Each LF LF Each Each LF LF LF LF LF LF LF LF		

98		Thermoplastic Pvmt. Mkg. Chars. (120 MILS)	8	Each	
00		Thermoplastic Pvmt. Mkg. Symbols (90	20	T 1.	
99	1205	MILS)	38	Each	
100		Snowplowable Raised Pvmt. Markers	175	Each	
101		4" Meter Vault Precast Conc. 8'x6"x5' deep	1	F 1	
101	1515	with Hatch	1	Each	
102		2" Meter Box	1	Each	
100		Remove and Reinstall 4" Meter, Valves, and		- ·	
103		Appurtenances to new Meter Vault Remove and Reinstall 2" Meter, Valves, and	<u> 1</u>	EA	
104		Appurtenances to new Meter Box	1	EA	
		Conc. Pads 4" Thick for Backflow Preventor			
105		Reloc.	4	SY	
106		Relocate exisitng 4" Backflow Preventor	1	F.4	
106		Assembly Relocate exisitng 2" Backflow Preventor	1	EA	
107		Assembly	1	Each	
		Demolition and Abandonment of exist. Meter			
108	1530	Vault, Meter Box and Backflow Conc. Slabs	1	EA	
109	1515	4" Gate Valve & Grade Box	1	Each	
110	1515	2" Gate Valve & Grade Box	1	Each	
111	1510	6" DIP Water Pipe	16	LF	
112		4" DIP Water Pipe		LF	
113		2" Brass Pipe Lead-free Water Pipe	50	LF	
114	1515	16"x6"Tapping Sleeve & Valve	1	Each	
115	1515	Relocate existing Firehydrant Assembly	2	Each	
		Install 6" MJ RJ Plug and Conc. blocking for			
116		Fire Hydrant Removal	1	Each	
117		Remove exist. 3/4"-1" Meter Assy. and Reinstall in New Boxes behind New Curb	3	Each	
118	1605	Temporary Silt Fence	805	LF	
119	1610	Erosion Control Stone, Class A	75	Ton	
120	1610	Sediment Control Stone	235	Ton	
121	1615	Temporary Mulching	1	Acre	
122	1620	Seed for Temporary Seeding	100	LB	
123	1620	Fertilizer for Temporary Seeding	0.5	Ton	
124	1622	Temporary Slope Drains	200.0	LF	
125	1631	Matting for Erosion Control	150.0	SY	
126	1632	1/4" Hardware Cloth	1,170	LF	
127	1660	Seeding and Mulching	0.5	Acre	
128	1660	Mowing	0.5	Acre	

129	1661	Seed for Repair Seeding	50.0	LB	
130		•		Ton	
131		Fertilizer for Repair Seeding			
		Seed for Supplemental Seeding	50.00		
132		Fertilizer Topdressing		Ton	
133		Specialized Hand Mowing		MHR	
134		Natchez Crape Myrtle (B&B, 1", 6-8')	4		
135		Crimson Pygmy Barberry (1 gal)	20		
136		Mulch for Planting	25		
137	SP	Response for Erosion Control	25.00	Each	
138	SP	Design Retaining Wall	1	LS	
139	SP	Construct Retaining Wall, Sta. 12+41	807	SF	
140	SP	Pedestrian Safety Rail	198.0	LF	
141	1705	Signal Cable	1,300.0	LF	
142	1705	Vehicle Signal Head (12", 3 Section)	12.0	Each	
143	1710	Messenger Cable (1/4")	3,600.0	LF	
144	1715	Tracer Wire	145.0	LF	
145	1715	Paved Trenching (1, 2")	32.0	LF	
146	1715	Unpaved Trenching (1, 2")	1,183.0	LF	
147	1715	Directional Drill (1, 2")	128.0	LF	
148	1716	Junction Box (Standard Size)	8.0	Each	
149	1716	Junction Box (Over-sized, Heavy Duty)	10.0	Each	
150	1722	2" Riser with Heat Shrink Tubing	4.0	Each	
151	1725	Inductive Loop Sawcut	710.0	LF	
152	1726	Lead-in Cable (14-2)	1,480.0	LF	
153		Communications Cable (12 Fiber)	4,000.0		
154		Interconnect Center		Each	
155		Fiber-Optic Transceiver, Self-healing Ring		Each	
156		Delineator Marker		Each	
157		Furnish Fiber-optic Restoration Kit		Each	
158		Furnish Fiber-Optic Power Meter		Each	
159		Furnish Optical Light Generator		Each	
160		Furnish Fiber-Optic OTDR		Each	
161		Metal Pole with Single Mast Arm		Each	
		-			
162	SP	Soil Test	3.0	Each	

163	SP	Drilled Pier Foundation	21.0	CY	
164	SP	Mast Arm with Metal Pole Design	3.0	Each	
165	1745	Sign for Signals	4.0	Each	
166	1750	Signal Cabinet Foundation	4.0	Each	
167		Controller with Cabinet (Type 2070L, Base Mounted)	4.0	Each	
168	1751	Detector Card (Type 2070L)	9.0	Each	
169	1753	Cabinet Base Extender	4.0	Each	
170	SP	Ethernet Edge Switches	1.0	Each	
171	SP	Emergency vehicle preemption device	1.0	Each	

TOTAL BID	\$



Poplar Tent (SR 1394) and US 29 Intersection Improvements TIP Number: C-4918A

Prebid Meeting Minutes
March 30, 2017, 2:00 pm
Brown Operations Center

- 1. Project Location/Scope US 29 and Poplar Tent/McGill Street Intersection. Install three signalized bulbs to create a modified super street intersection. Work includes grading, storm drain, signals, pavement marking, curb and gutter, asphalt, wall design and construction and driveway closures.
- 2. Bids Due: April 20th at 2:00 pm, Ready Room. Address 850 Warren C. Coleman Blvd.
- 3. Date of availability not before May 15, 2017 or later than July 1, 2017
- 4. Completion date 180 calendar days.
- 5. Liquidated damages \$750/calendar day.
- 6. Day and Time restrictions on US 29 Monday thru Friday 6 am to 9 pm.
- 7. Maintain driveway access to businesses.
- 8. DBE goal 6%
- 9. Availability of lands/Easements. Easements are acquired.
- 10. Project Special Provisions include asphalt pavement sealer, design and construct retaining wall, pedestrian safety rail.
- 11. Utilities Concord Electric has poles to relocate at bulb location near Punchy's diner. Gas Company has a line to relocate to avoid storm on McGill.